COMPETITIVE PLAN IMPLEMENTATION GRANT PROGRAM KANSAS ELECTRONIC WASTE STANDARDS

In this document, the term "collection facility" means any operation that accepts and stores, but does not process, electronic waste. The term "processing facility" means any operation that accepts, processes, and markets recyclables. The term "customer" means any individual, company, or other entity from whom a collection or processing facility accepts electronic waste, whereas "vendor" means any company that accepts materials from a collection or processing facility for further processing, recycling, or disposal.

It is the intent of these standards, combined with existing e-waste policies, to establish a baseline of best management practices to ensure an effective and efficient system of collection and processing of electronic wastes; a system that provides quality of service; deals with data security issues; creates jobs in a level playing field while protecting the health and environment of Kansas and its citizens. A majority of the standards will be able to be met through proper planning and establishment of policies and procedures in an operating plan developed for each facility. The expectation is that each facility, whether public or private, needs to just demonstrate its ability to meet the intent of these standards at the collection site or through its downstream vendors. Often through proper signage, contracting, site security and insurance much of this can be accomplished.

STANDARDS FOR COLLECTION FACILITIES

Complying with the following standards signifies that the e-waste collection facility is committed to the responsible management of surplus and end-of-life electronics. All Competitive Plan Implementation Grant recipients must comply with these standards.

Customer Assurance

The collection facility must make a copy of the Kansas Electronic Waste Standards, including a signed agreement to abide by these standards, available by request to any customer.

General operations

The collection facility must:

- 1. Comply with all applicable federal, state, and local environmental and safety laws and regulations.
- 2. Maintain an effective safety program for facility staff, including appropriate training.
- 3. Implement and maintain an effective environmental management system.
- 4. Implement and maintain an effective site security program for the facility.
- 5. Document safety, environmental, and security audits of the facility.
- 6. Utilize only those downstream vendors that are in complete compliance with all applicable federal, state, and local environmental and health and safety regulations. All Kansas vendors should have a Solid Waste Processing Facility Permit for an E-Waste Reclamation Facility.
- 7. Ensure that facility staff has adequate technical knowledge, skills, and experience to safely work with electronic waste.

Data Security

If the collection facility intends to reuse or resell the unit, they must:

- 1. Provide the customer with assurance that all electronic waste will be properly and securely stored, according to the facility's site security program, in order to provide data security prior to erasure of data.
- 2. Use reliable data erasure software to delete all data from the unit. The collection facility should provide certification of data erasure to its customers, if requested.
- 3. Remove all other data-containing devices (i.e. compact discs, flash cards, etc.) from every unit. These must be erased, if feasible, or destroyed.

If the collection facility intends to send all data containing units to a vendor for processing, they must:

- 1. Provide the customer with assurance that all electronic waste will be properly and securely stored, according to the facility's site security program, in order to provide data security prior to transport of materials to a vendor.
- 2. Document the transfer of ownership of all data-containing devices to a vendor that complies with all applicable federal, state, and local environmental and safety laws and regulations. This vendor must implement a process to control and document the complete destruction of data from all units. See the Additional Kansas Electronic Waste Standards for Reclamation Facilities for further information.

If the collection facility intends to **destroy data containing units** (hard drives) at the collection facility:

- 1. All data-containing devices (i.e. compact discs, flash cards, etc.) must be removed from every unit. These must be erased, if feasible, or sent to a vendor for erasure or destruction.
- 2. Provide the customer with assurance that all electronic waste will be properly and securely stored, according to the facility's site security program, in order to provide data security prior to physical destruction of data containing units.
- 3. Destroy end-of-life data containing units to prevent retrieval of information. **This data security** measure does not constitute processing. The collection facility should provide certification of destruction to its customers, when requested.

Operations

The collection facility must:

- 1. Implement the following hierarchy of management options, as consistent with economic, security, and other factors identified by the customer and the facility:
 - a. Reuse of whole units
 - b. Repair/refurbishment/remanufacturing of units
 - c. Recovery/reuse of functional peripherals or components
 - d. Recycling of constituent materials
 - e. Responsible disposal of hazardous and non-hazardous wastes
- 2. Dispose of **only** those wastes that cannot be sent on to a vendor for repair, recovery, or recycling of constituent materials.
- 3. Use a calibrated scale that is certified annually by a third party, and maintain documentation of annual certifications.
- 4. Clearly label waste while it is stored, in a manner comprehensive enough to identify it.
- 5. Provide KDHE with a report accounting for the disposition of **all materials received**, including the information listed below, on forms provided by KDHE.
 - a. Equipment sent to brokers/buyers/processors for ultimate reuse, parts recovery, recycling, and disposal:
 - i. Weight of whole units, categorized by type (i.e. TVs, CPUs, CRTs, keyboards, printers, and other peripherals)
 - ii. Weight of parts/components, categorized by type (i.e. whole circuit boards, shredded or whole hard drives, etc.)
 - iii. Weight of end-of-life whole units, categorized by type
 - iv. Weight of end-of-life parts/components, categorized by type
 - v. Weight of non-recyclable parts/components disposed of, categorized by type and means of disposal (incineration, disposal in hazardous or MSW landfills)
 - b. Additionally, the collection center must include:
 - i. Documentation of the transfer of ownership for all electronic equipment, components, and materials received.
 - ii. Documentation of tax-deductible donations of equipment.
- 6. Make reasonable assurances that downstream vendors in the chain of custody, both domestic and international, will provide some documentation of regulatory compliance and responsible recycling and disposal. (The use of KDHE approved vendors will meet this requirement.)

COMPETITIVE PLAN IMPLEMENTATION GRANT PROGRAM KANSAS ELECTRONIC WASTE STANDARDS FOR RECLAMATION FACILITIES

In this document, the term "processing facility" means any operation that accepts, **processes**, and markets recyclables. The term "collection facility" means any operation that accepts and stores, but does not process, electronic waste. The term "customer" means any individual, company, or other entity from whom a collection or processing facility accepts electronic waste, whereas "vendor" means any company that accepts materials from a collection or processing facility for further processing, recycling, or disposal.

It is the intent of these standards, combined with existing e-waste policies, to establish a baseline of best management practices to ensure an effective and efficient system of collection and processing of electronic wastes; a system that provides quality of service; deals with data security issues; creates jobs in a level playing field while protecting the health and environment of Kansas and its citizens. A majority of the standards will be able to be met through proper planning and establishment of policies and procedures in an operating plan developed for each facility. The expectation is that each facility, whether public or private, needs to just demonstrate its ability to meet the intent of these standards at the collection site or through its downstream vendors.

Complying with the following standards signifies that the e-waste recycling/reclamation facility is committed to the responsible management of surplus and end-of-life electronics. Any facility that processes electronic waste must follow these standards in addition to the electronic waste standards for collection facilities. All Competitive Plan Implementation Grant recipients must comply with these standards.

Data Security

The processing facility must implement a process to control and document the destruction of data from all equipment or media received, by means of a data erasure process, degaussing and/or by physical destruction. This process should include:

- 1. Use of tested, reliable software for data erasure regardless of whether the unit is to be reused, resold, or disposed. The processing facility should provide certification of data erasure to its customers.
- 2. Complete destruction of end-of-life data containing units to prevent retrieval of information. The processing facility should provide certification of data containing unit destruction to its customers.
- 3. Removal and destruction of all of the following:
 - a. Flash cards
 - b. Printer hard drives
 - c. Compact discs
 - d. VCR tapes
 - e. Typewriter ribbons
 - f. Printer spools
 - g. Any other device that might hold data.
- 4. Implementation of a quality assurance process to ensure effectiveness of data erasure on units to be reused or resold.

Operations

The processing facility must:

- 1. Have completed and submitted KDHE's Application for a Solid Waste Processing Facility Permit for an E-Waste Reclamation Facility, which ensures that the facility has a comprehensive operating plan, sufficient insurance and financial assurance, a complete closure plan, and a contingency plan.
- 2. Document the removal of hazardous components, such as fluorescent tubes, mercury-containing switches and relays, and nickel-cadmium and lithium batteries, from equipment before shredding it.
- 3. Make asset numbers, asset tags, or serial numbers identifying each piece of equipment or each component *or other practical inventory mechanism* available to KDHE as evidence of disposition.

Export Practices

The processing facility must:

- 1. Maintain documentation for exports of electronic materials from the United States for one year or as required in applicable export documentation retention schedules, whichever is longer. This documentation includes the following:
 - a. Shipping manifests identifying the destination, recipient, the make, model, and condition for all declared reuse items, and
 - b. Any other information necessary to complete the export.
- 2. Comply with the U.S. Environmental Protection Agency's Cathode Ray Tube (CRT) Rule for export of CRTs.
 - a. Exporters shipping broken or unbroken CRTs to another country for recycling must notify EPA and receive written consent from the receiving country through EPA before shipments can be made.
 - b. Exporters shipping used, unbroken CRTs for reuse to another country must submit a one-time notification to EPA.
- 3. Not export non-functional CRTs or any other hazardous equipment, components, or materials from the United States to any country other than:
 - a. Member countries of the Organization for Economic Cooperation and Development (OECD);
 - b. Members of the European Union; or
 - c. Countries that have entered into an agreement with the United States allowing for such exports.